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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,701	05/19/2005	Yasushi Takano	0033-1003PUS1	9238
2292	7590	06/19/2007	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			RONESI, VICKEY M	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			1714	
NOTIFICATION DATE		DELIVERY MODE		
06/19/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[mailroom@bskb.com](mailto:mailroom@bskb.com)

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/535,701	TAKANO, YASUSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Vickey Ronesi	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 May 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/19/05.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, the word "type" to describe the resin is indefinite because it is not made clear what is being encompassed.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al in view of Wypych (*Handbook of Fillers*).

He et al discloses a powder coating composition, wherein an aluminum flake filler is adhered to the surface of the powder coating through a viscous layer.

He et al fails to disclose the average particle size of the aluminum flake filler.

Wypych discloses common properties of aluminum flakes and that aluminum flakes are typically known to have a particle thickness of 0.1-2 µm and aspect ratio of 20-100 (page 16).

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Given that he et al discloses the use of aluminum flakes and further given that aluminum flakes are known to have a particle size of less than 100 microns as taught by Wypych, it would have been obvious to one of ordinary skill in the art to utilize a typical aluminum flakes with a particle size as taught by Wypych and thereby intrinsically obtain a composition with a bonding ratio of at least 90 % since an adhesive is used to bind the pigment to the powder coating.

3. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mikami et al (JP 52-128927, full English-language translation) in view of Sasaki et al (US 4,180,607), He et al (US 5,824,144), and Wypych (*Handbook of Fillers*).

Mikami et al discloses a powder coating composition that is used to obtain a powder coating film comprising a powder base paint, a metallic pigment such as aluminum powder and mica powder (page 4, lines 16-24) which can be coated (page 4, lines 30-32), and a resin solution (i.e., a binder). Example 1 has an aluminum metallic pigment that is coated with the composition on page 6, lines 23-28 which contains (page 7, lines 12-21), wherein the amount of resin composition coat to aluminum powder is 17 g.

Mikami et al discloses the use of an aluminum powder as the metallic pigment, however, it does not disclose whether it is in flake form or the size of the metallic pigment.

He et al discloses a powder coating composition with metallic pigments and teaches that aluminum flakes are suitable to prepare powder coating compositions (col. 2, line 60).

Wypych discloses common properties of aluminum flakes and that aluminum flakes are typically known to have a particle thickness of 0.1-2  $\mu\text{m}$  and aspect ratio of 20-100 (page 16).

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Given that Mikami et al is open to the use of aluminum powder as the metallic pigment and further given that He et al discloses that aluminum flakes are used to prepared powder coating compositions with a metallic finish, it would have been obvious to one of ordinary skill in the art to utilize an aluminum flake with a typical particle size as taught by Wypych as the metallic pigment of Mikami et al and thereby intrinsically obtain a composition with a bonding ratio of at least 90 % since a solution resin is used to bind the pigment to the powder coating.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mikami et al (JP 52-128927, full English-language translation) in view of He et al (US 5,824,144) and Wypych (*Handbook of Fillers*) and further in view of Symietz (US 4,507,421).

The discussion with respect to Mikami et al, He et al, and Wypych in paragraph 3 above is incorporated here by reference.

Mikami et al fails to disclose the use of a terpene resin, however, it teaches that a variety of resins can be used on page 5, lines 1-6.

Symietz discloses a sealant composition and teaches known tackifying agents include those recited by Mikami et al and terpene resins (col. 2, lines 19-35).

Given that Mikami et al is open to any resin and further given the Symietz which teaches that well known tackifying resins include terpene resins, it would have been obvious to one of ordinary skill in the art to utilize a terpene resin in the resin solution of Mikami et al, absent a showing of unexpected or surprising results.

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5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mikami et al (JP 52-128927, full English-language translation) in view of He et al (US 5,824,144) and Wypych (*Handbook of Fillers*) and further in view of Sasaki et al (US 4,180,607).

The discussion with respect to Mikami et al, He et al, and Wypych in paragraph 3 above is incorporated here by reference.

Mikami et al discloses a powder coating composition comprising a resin solution containing an organic solvent having a boiling point of 100°C or below (page 5, lines 8-9) which dissolves the resin but not the powder base paint (page 5, lines 21-22) and a resin having a glass transition temperature (i.e., softening temperature) of 50-100°C (page 4, lines 28-29).

Mikami et al does not explicitly disclose the molecular weight of the solution resin, however, note Example 5 (page 9, line 19 to page 35) which comprises mica and a resin solution containing Epicoat 1004 which has a molecular weight of 1400 as taught by Sasaki et al in col. 9, line 66 to col. 10, line 2.

Given that Mikami et al exemplifies a solution resin with a molecular weight of 1400 as taught by Sasaki et al, it would have been obvious to one of ordinary skill in the art to utilize a solution resin with the presently claimed molecular weight.

### *Conclusion*

6. The International Search Report for PCT/JP03/14682 lists the following X references which are not used in the present Office action: JP 08-143788, JP 2000-204289, JP 2000-219825, JP 2001-139887, JP 09-291230, US 3932347, JP 2002-105381, and JP 09-071734.

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They were not used in the above prior art rejections because the disclosures of these references do not provide additional information which could be used in the prior art rejections of record.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/8/2007  
Vickey Ronesi



Vasu Jagannathan  
Supervisory Patent Examiner  
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